NEW TINGIDAE (Hemiptera)

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The present paper contains the descriptions of three new genera and five new species of lace bugs from widely separated regions. A question is also raised regarding the type locality and distribution of *Caloloma uhleri* Drake and Bruner from the West Indies. Unless otherwise designated under the descriptions, the types are in my collection.

Euaulana, n. gen.

Head moderately long, with five spines, the median arising between the eyes, the tylus and bucculae projecting beyond base of antennae; eyes transverse. Bucculae long, closed in front. Antennae short, widely separated at base, moderately stout, shortly pilose; segments I and II very short, moniliform, swollen; III slenderest; IV short, subclavate. Rostral channel long. deep, the basal four or five abdominal segments deeply furrowed along median line for reception of rostrum. Rostrum very long, extending on abdomen. Metasternal orifice indistinct. Hypocostal ridge uniscriate. Pronotum moderately narrowed anteriorly, truncate or subtruncate in front, longly transversely convex, finely pitted, tricarinate; collar distinct, closely reticulate, slightly more elevated along median line; paranota narrow, slightly wider in front, finely areolate. Elytra divided into the usual areas, rather closely reticulate, extending a little beyond apex of abdomen; discoidal area large, very long, extending considerably beyond middle of elvtra. Legs short, moderately stout, shortly setose.

Generotype. Euaulana ferritincta, n. sp.

This genus may be separated readily from the genus *Tingis* Fabr. and closely allied genera by the much longer head and bucculae. The rostrum is extremely long in the two species described below. Although the genus *Euaulana* resembles somewhat certain genera of the subfamily Cantacarinae the absence of clavus of elytra and longly produced hind margin of pronotum place it in the subfamily Tinginae.

EUAULANA FERRITINCTA, n. sp.

Moderately large, obovate, brownish, variegated with blackfuscous spots. Head rugulose, with five, short spines. Antennae brown, short; segment I very short, thicker and a little longer than II; III cylindrical, yellowish brown, twice as long as IV; IV subclavate, clothed with longer hairs, about as long as I and II conjoined. Rostrum extremely long, brown, reaching on fourth segment of venter. Legs short, dark brown, shortly pilose, the femora moderately stout.

Pronotum moderately convex, closely pitted, distinctly tricarinate; all carinae slightly more raised posteriorly, there finely areolate, non-reticulate on disc and in front; lateral carinae broadly concave within on disc, slightly converging posteriorly; paranota narrow, uniseriate, slightly wider in front; collar low, areolate, the anterior margin somewhat concave. Elytra narrowed posteriorly, sutural areas completely overlapping behind in repose; costal area rather narrow, mostly uniseriate, some of the areolae irregularly divided; subcostal area wider, mostly triseriate, quadriseriate in widest part; discoidal area large, about three-fourths as long as elytra, bounded by a costate nervure, with the outer margin sinuate, widest near middle, there six areolae deep; sutural area closely areolate.

Length, 3.45 mm.; width, 1.20 mm.

Type (male), Burleigh, Queensland, Australia, Sept. 1, 1928, H. Hacker; allotype (female), Tugun, Queensland, Jan. 24, 1929, collected by H. Hacker. Paratypes, 3 specimens from Queensland (Hacker), one from Cheltenham, Victoria, Oct. 7, 1921 (J. Dixon) and two specimens from Hobart, Tasmania, taken by A. M. Lea. The color varies slightly in the type series.

EUAULANA TASMANIAE, n. sp.

Separated from *E. ferritincta*, n. sp. by the larger cephalic spines, longer and more slender antennae, distinctly more elevated, uniseriate pronotal carinae, the wider paranota and wider costal area. Antennae shortly pilose; segment III slender, two and one half times as long as IV. Paranota irregularly biseriate, also costal area of elytra; discoidal area seven-ninths the entire length of elytra, with eight rows of cells at widest points; subcostal area 4- to 5-seriate. Color light brown. Other characters very similar to *ferritincta*, n. sp.

Length, 3.55 mm.; width, 1.20 mm.

Type (female) and paratype, Hobart, Tasmania, collected by $A.\ M.\ Lea.$

Idiostyla, n. gen.

Head short, with five spines. Rostrum moderately long, extending beyond middle of mesosternum. Rostral channel parallel and not constricted on mesosternum; subquadrate and closed on all four sides on metasternum. Bucculae broad, moderately long.

reticulate, closed in front. Eves transverse. Antennae long, slender indistinctly pilose; segment I very long, moderately stout, distinctly longer than width of head across eyes; 11 very short, III very long, slenderest; IV long, scarcely swollen; antenniferous tubercles very broad, lamina-like, reticulate. Orifice present, very small, margined with narrow rim. Pronotum moderately, transversely swollen, closely pitted, tricarinate; calli deep; collar sharply raised, reticulate, slightly more raised at middle, there slightly obtusely produced forward, anterior margin bisinuate: hind triangular part reticulated; paranota rather narrow, moderately reflexed, reticulate, almost rectangular in outline. Elytra very long, rather narrow, extending considerably beyond apex of abdomen, distinctly divided into the usual areas; discoidal area elongate, not reaching middle of elytra; male and female genital segments narrow, the claspers of male strongly curved, the last abdominal segment of female terminating on each side above in a small stylet.

Generotype, *Idiostyla (Tigava) anomae* (Drake and Hambleton) from Brazil.

This genus belongs to the distinctly lacy genera of lace bugs. The lacyness of the elytra and paranota, narrow genital segments, high collar and small orifice separate it from the genus Tigava Stal. It is probably more closely allied to certain groups of the composite genus Leptopharsa Stal. Tigava rollinae Drake & Hambleton from Brazil is also transferred to the new genus Idiostyla.

Genus Caloloma Drake & Bruner

Caloloma Drake & Bruner, Mem. Soc. Cubana Nat. Hist. "Felipe Poey," Vol. VI, Nos. 3 and 4, 1924, p. 152. (reprint, p. 11).

This genus was erected by Drake and Bruner for *C. uhleri* from the specimens in the late Uhler Collection, taken in the Lesser Antilles (San Juan). Both the genus and the species are valid and, as stated by the describers, belong to the distinctly lacy group of tingid genera.

A few years ago the writer received several undetermined lace bugs from the Vienna Museum. The Australian material in this collection included three typical specimens of the genus *Caloloma* Uhler, all mounted on one rectangular card with the pin bearing the label "Fischer Austra. Post 1, 1878." These specimens now raise a serious question regarding the type locality and distribution of *C. uhleri*. Although I have studied many collections of lace bugs from neotropical America and Australia, these are the only known records for this species. It seems advisable at this time simply to raise a question regarding the distribution and type locality of *C. uhleri* and then wait until more specimens are

collected before making correction relative to distribution. The species is not represented in the large Hacker Collection of Australian Hemiptera.

ETEONEUS INOPINUS, n. sp.

Elongate-ovate, smooth, reddish brown, the areolae of elytra hyaline. Head short, rugulose; spines greatly reduced. Antennae rather stout, moderately long, longly setose, the terminal segment dark fuscous; segments I and II stout, short, the latter slenderer and shorter; III less than twice as long as IV, the latter fusiform. Rostrum long, extending on metasternum, testaceous, dark at apex; laminae thick, brown, obliquely converging and nearly meeting on metasternum. Legs moderately stout, the tibiae becoming lighter in color. Abdomen brown, lighter in color than sternum.

Pronotum moderately convex, finely pitted, unicarinate; collar raised, areolate, truncate in front; paranota represented by very low, ridge-like carinae. Elytra long, ovate, overlapping and jointly rounded behind in repose; costal area moderately wide, uniseriate, the areolae subquadrate; subcostal area wider, mostly quadriseriate; discoidal area moderately large, narrowed at base and apex, with the outer boundary arcuate, widest beyond middle, there four areolae deep; sutural area more widely areolate, with fuscous spot (veinlets) near base. Male genital segment concave along outer margins, the claspers strongly curved.

Length, 3.00 mm.; width, 1.30 mm.

Type, male, Bulamayo, Southern Rhodesia, June, 1917. This is the first record of the genus *Eteoneus* Distant from Africa.

Tigavaria, n. gen.

Separate from *Tigava* Stal, by the unicarinate pronotum and strongly convex dorsal surface of head. Head with five spines, the median arising between the eyes, the front pair placed a little in front of eyes, and the hind pair as in *Tigava*. Paranota scarcely distinct, represented by low carinae. Rostrum moderately long, the channel wide, cordate on mesosternum, closed behind. Bucculae closed in front. Orifice indistinct. Hypocostal ridge wide, biseriate. Female genital segment very broad, with a blunt tubercle on each side of hind margin. Elytra long, narrow, divided into the usual area; discoidal area extending beyond middle of elytra. Legs long, slender.

Generotype, Tigavaria (*Tigava*) unicarinata (Hacker) from Australia

The location of median and frontal cephalic spines, unicarinate paranota and biseriate hypocostal laminae are distinguishing structures.

Froggattia hargreavesi, u. sp.

Very similar to *F. olivina* Horvath, but easily separated from it by the distinctly shorter antennae, narrower costal area, narrower paranota, shorter cephalic spines, and less raised pronotal carinae. Head brown, with five short, testaceous spines. Antennae rather short, indistinctly pilose; segment I and H stout, short, brownish black, the latter slightly shorter and obconical; HI testaceous, straight, practically twice the length IV; IV fusiform, clothed with long scattered hairs. Pronotum rather strongly convex; lateral carinae distinct, only slightly convex within in front, the median more elevated. Costal area of elytra uniseriate, the areolate small. Other characters very similar to *F. olivina*.

Length, 3.35 mm.; width, 1.45 mm.

Type (male) allotype (female), Kampala, Uganda, Oct., 1933, collected on Jasminum dichotomum, by H. Hargreaves, in British Museum. Nine paratypes, bearing same data as above.

URENTIUS VEPRIS, n. sp.

Small, testaceous, some of the veinlets embrowned, the spines rather long, distinctly more numerous than in *U. cuonymus* Distant and *U. maculatus* Drake. Antennae testaceous, longly setose, the last segment dark fuscous. Legs testaceous, distinctly setose. Rostrum reaching between intermediate legs, yellowish brown, becoming much darker distally; rostral laminae white, foliaceous, spinose along lower margins, open behind. Bucculae broad, closed in front, brown, margined with testaceous, distinctly setose. Body beneath brown, sometimes almost fuscous, clothed with numerous white setae. Head brown, setose, with five, long, slender, testaceous spines. Eyes reddish, strongly transverse.

Pronotum strongly convex; collar raised, slightly expanded and raised at middle; paranota large completely reflexed, with margins touching median carina, with a raised, longitudinal vein within on each side; median carina foliaceous, uniseriate, more raised posteriorly; lateral carinae short, visible on triangular process, convex within. Elytra strongly, closely spinose; costal area rather narrow, uniseriate; the areolae moderately large, the outer margins beset with numerous long spines; discoidal area separated from subcostal area by a raised nervure. Wings longer than abdomen.

Length, 2.10 mm.; width, 0.90 mm.

Type (male), Commando Nek, Pretoria, Transvaal, Nov. 22, 1928, breeding on *Hermannia micropetcla*, British Museum, London. Paratypes, 5 specimens taken with type. In one paratype the basal half of the costal area is biseriate. This species is distinctly more closely spined than other species having uniseriate costal area.